



## MEMORANDUM

SUBJECT: Arkwood Superfund Site Draft Air Monitoring Plan

FROM: Mark Hansen  
Air Superfund Coordinator (6T-ET)TO: Cynthia Kaleri  
Remedial Project Manager (6H-EA)

At your request, I have reviewed the Draft Air Monitoring Plan for the Arkwood Superfund Site. The Plan is described in Appendix G of the Remedial Design and was faxed to you on May 5, 1994. I offer the following comments for your consideration.

## Section 1.2.1 -

This Section describes particulate air sampling with a Mini Ram monitor. It is important that the "audible alarm" described here be able to be heard above the noise of construction activities (such as bulldozers, trucks, etc.). Also, if a more powerful audible alarm is not readily available, I recommend the use of a visual alarm (warning light).

Also in the first paragraph of this Section you describe calculation of an average as the average of 3 readings from 3 discrete samples (9 readings). What averaging period is this referring to? Why not use the average value which is automatically calculated by the MiniRam monitor?

## Tables G-1 and G2 -

The purpose of the Pre-Excavation (Background) air sampling and monitoring period is twofold: 1) to perform equipment shake-down, and; 2) to estimate the air quality in the area prior to any remediation activities. Since the data from the Background period may be used to compare to periods during remediation I recommend that we keep the sampling methods, periods and analysis consistent between sampling Phases. Table G-1 describes 3 different dioxin analyses for the Perimeter Air Monitoring and various sampling periods for the same sample constituent.

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Also, Table G-1 presupposes a reduced sampling frequency due to minimal air emissions. It should be very clear that a reduced air sampling frequency is not warranted if air samples show air concentrations near the State TLV/100 air action level guideline.

#### Section 1.4 -

The first paragraph of this Section describes action levels. Please clarify that OSHA and ACGIH standards are not appropriate for offsite residents. In order to be more protective of sensitive populations, the State of Arkansas has established guidelines which call for the dividing the TLV by a factor of safety of 100 (TLV/100)

##### Section 1.4.1.1 - Calculation of Action Levels

The method for developing air action levels described in this Section may be only mildly representative of actual field activities due to the uncertainties associated with non-homogeneous wastes, meteorological conditions, and model uncertainties. This approach should be used with caution and reviewed on a periodic basis throughout the remediation to ensure that assumptions such as maximum soil concentrations are consistent with data collected during remediation.

The last paragraph in this Section states that "It should be noted that these action levels are conservative." Please elaborate fully on the conservative nature of these action levels.

Various parts of this action level discussion describe the action level for total dust as 1.7 mg/m<sup>3</sup>. However, Table G-5 lists 1.6 mg/m<sup>3</sup> as the calculated action level. Please re-calculate this value and clarify which is correct.

##### Section 1.4.2.1 -

This Section states in the third sentence that "action levels for perimeter and off-site monitoring have been adjusted from a healthy worker population to a residential population." Please elaborate fully.

#### Table G-7 -

The value depicted in this Table for the Dioxin TLV/OEL is not official. It needs to be clarified that this is a preliminary value and not an official TLV/OEL. This value needs to be fully explained in the text.

#### Section 1.4.2.2 -

The sentence following Table G-8 describes actions to be taken if action levels are exceeded. Significantly more explanation is needed here. It should include at a minimum, work control activities such as the application of water and foams, work stoppage, work area evacuation, and notification of State and EPA project managers.

If you have questions regarding my comments or if I can be of assistance, please call me at X-7548.